

17th, 22d, 23d, and 24th; and in Wyoming on the 18th and 30th.

AURORAS.

Notable auroral displays of September, 1892.

Date.	Station.	Extent of display.		Remarks.
		Azimuth.	Altitude.	
1	Sault Ste. Marie, Mich..	240 to 270	20	Pale yellow color.
12	Sault Ste. Marie, Mich..	180 to 270	40	Pale yellow resting on dark segment, with beams of light.
12	Saint Paul, Minn	170 to 210	10	Pale light resting on dark segment.
12	Fort Buford, N. Dak....	180 to 225	18	Two arches, with small, brilliant streamers.
16	Grand Haven, Mich.....	90 to 160	60	Pale light, with grayish white streamers.
16	Sault Ste. Marie, Mich..	180 to 270	50	Bluish light, with shooting beams of light.
16	Saint Paul, Minn	180 to 210	60	Faint light, with vertical shooting beams.
27-28	Marquette, Mich	135 to 225	45	Faint arch, with streamers.
27	Sault Ste. Marie, Mich..	180 to 270	25	Greenish color.

Auroral displays of September, 1892—Continued.

Date.	Station.	Extent of display.		Remarks.
		Azimuth.	Altitude.	
28-29	Marquette, Mich	135 to 225	75	Pale green, with beams of light which moved from west to east.
28	Saint Paul, Minn	170 to 210	14	Pale light, with slender vertical beams of white light.
28	Havre, Mont.....	Cor'd 190	45	Pale green tint, with occasional beams.

The more widely observed auroral displays of the month were reported from New England, New York, and Pennsylvania to eastern Idaho and eastern Montana on the 12th; from New England to Iowa, Minnesota, and eastern North Dakota on the 16th; from Maine to Washington and southward to Missouri on the 27th and 28th; and from the upper lake region to Montana on the 29th.

STATE WEATHER SERVICES.

[*Temperature in degrees Fahrenheit; precipitation, including melted snow, in inches and hundredths.*]

The following extracts and summaries are republished from reports for September, 1892, of the directors of the various state weather services:

ALABAMA.

Temperature.—Maximum, 110, at Union Springs, 1st; minimum, 37, at Jasper, 29th; greatest monthly range, 60, at Union Springs; least monthly range, 24, at Pittsboro.

Precipitation.—The average was 0.54 above the normal; greatest monthly, 7.51, at Maysville; least monthly, 0.73, at Livingston.—*P. H. Mell, Observer, Weather Bureau, Auburn, director.*

ARIZONA.

The month was unusually warm and dry.

Temperature.—Maximum, 111, at Arizona Canal Company's Dam, 26th, and at Yuma, 27th; minimum, 41, at Fort Apache, 5th and 27th; greatest monthly range, 55, at San Carlos; least monthly range, 24, at Farleys Camp.

Precipitation.—Greatest monthly, 1.23, at Fort Apache; least monthly, 0.00, at a number of stations.

Wind.—Prevailing direction, southwest.—*J. C. Hayden, Observer, Weather Bureau, Tucson, director.*

ARKANSAS.

Temperature.—The mean was 1.9 below the normal; maximum, 96, at Texarkana, 10th, and at Keesees Ferry, 25th; minimum, 43, at Fayetteville, Harrison, Hot Springs, and Melbourne, 14th, at Kirby, 2d, and at Melbourne, 23d; greatest monthly range, 52, at Hot Springs; least monthly range, 32, at Prescott.

Precipitation.—The average was 1.01 below the normal; greatest monthly, 6.96, at Greenville, Miss.; least monthly, trace, at Forrest.

Wind.—Prevailing direction, south.—*M. F. Locke, Commissioner of Agriculture, Little Rock, director; F. H. Clarke, Local Forecast Official, Weather Bureau, assistant.*

CALIFORNIA.

Temperature.—Maximum, 108, at Needles, 6th; minimum, 33, at Pleasanton, 4th; greatest monthly range, 60, at San Ardo and Winchester; least monthly range, 28, at Berkeley.

Precipitation.—Greatest monthly, 2.26, at Crescent City; least monthly, 0.00, at a number of stations.

Wind.—Prevailing directions, west and northwest.—*J. A. Barwick, Observer, Weather Bureau, Sacramento, director.*

COLORADO.

The month was the warmest and driest on record.

Temperature.—The mean was 4.2 above the normal; maximum, 99, at Lamar, 19th, and at Orchard, 16th; minimum, 19, at Alma, 11th; greatest monthly range, 65, at Delta; least monthly range, 42, at Grand Junction.

Precipitation.—The average was 0.80 below the normal; greatest monthly, 1.12, at Castle Rock; least monthly, 0.00, at a number of stations.

Wind.—Prevailing direction, west.—*W. S. Miller, Observer, Weather Bureau, Denver, director.*

FLORIDA.

Temperature.—Maximum, 94, at Mullet Key and Orlando, 5th, and at Bristol, 24th and 25th; minimum, 60, at Bristol, 15th, and at Pensacola, 16th; greatest monthly range, 34, at Bristol; least monthly range, 17, at Amelia.

Precipitation.—Greatest monthly, 16.67, at Titusville; least monthly, 1.72, at Pensacola.

Wind.—Prevailing direction, northeast.—*E. R. Demain, Observer, Weather Bureau, Jacksonville, director.*

GEORGIA.

Temperature.—Maximum, 98, at Bainbridge, 3d; minimum, 44, at Newnan, 29th; greatest monthly range, 45, at Louisville; least monthly range, 20, at Fleming.

Precipitation.—Greatest monthly, 20.05, at Darien; least monthly, 1.14, at Columbus.

Wind.—Prevailing direction, east.—*Park Morrill, Local Forecast Official, Weather Bureau, Atlanta, director.*

IDAHO.

Temperature.—Maximum, 94, at Boise Barracks, 15th; minimum, 20, at Lake, 8th; greatest monthly range, 60, at Boise Barracks and Lake; least monthly range, 48, at Moscow.

Precipitation.—Greatest monthly, 5.10, at Kootenai; least monthly, 0.02, at Martin.

Wind.—Prevailing direction, southwest.—*J. H. Smith, Observer, Weather Bureau, Idaho Falls, director.*

ILLINOIS.

Temperature.—The mean was 0.1 below the normal; maximum, 96, at Muddy Valley, 21st; minimum, 31, at Philo, 27th.

Precipitation.—The average was 1.02 below the normal; greatest monthly, 3.43, at Griggsville; least monthly, 0.43, at Rantoul.

Wind.—Prevailing direction, south.—*John Craig, Observer, Weather Bureau, Springfield, director.*

INDIANA.

Temperature.—The mean was 1.2 above the normal; maximum, 92, at Michigan City, 23d; minimum, 34, at Lafayette, 27th; greatest monthly range, 56, at Farmland and Point Isabel; least monthly range, 35, at New Albany.

Precipitation.—The average was 0.21 below the normal; greatest monthly, 8.00, at Huntingburg; least monthly, 1.22, at Lafayette.

Wind.—Prevailing direction, southwest.—*Prof. H. A. Huston, Lafayette, director; C. F. R. Wappenhans, Local Forecast Official, Weather Bureau, assistant.*

IOWA WEATHER AND CROP SERVICE.

Temperature.—The mean was 2.0 above the normal; maximum, 99, at Atlantic, 23d; minimum, 29, at Atlantic, 14th and 16th; greatest monthly range, 70, at Atlantic; least monthly range, 32, at Fort Madison.

Precipitation.—The average was 2.00 below the normal; greatest monthly, 4.15, at Delaware; least monthly, 0.16, at Ames.

Wind.—Prevailing direction, south.—*J. R. Sage, Des Moines, director; G. M. Chappel, Local Forecast Official, Weather Bureau, assistant.*

KANSAS.

Temperature.—The mean was 1.7 above the normal; maximum, 103, at Ulysses, 24th; minimum, 35, at Shields, 14th and 24th; greatest monthly range, 65, at Morland; least monthly range, 37, at Salina.

Precipitation.—The average was 1.23 below the normal; greatest monthly, 3.99, at Kellogg; least monthly, 0.00, at Colby and New England Ranch.

Wind.—Prevailing direction, south.—*Prof. J. T. Lovewell, Topeka, director; T. B. Jennings, Observer, Weather Bureau, assistant.*

KENTUCKY.

Temperature.—The mean was about 1.0 below the normal; maximum, 93,

at Shelbyville, 9th; minimum, 38, at Harrodsburg, 27th, and at Central City, 28th; greatest monthly range, 54, at Shelbyville; least monthly range, 27, at Mumfordsville.

Precipitation.—The average was slightly below the normal; greatest monthly, 5.18, at Mount Sterling; least monthly, 0.11, at Robard.

Wind.—Prevailing direction, south.—*Frank Burke, Observer, Weather Bureau, Louisville, director.*

LOUISIANA.

Temperature.—The mean was 2.7 below the normal; maximum, 100, at Clinton, 26th; minimum, 40, at Winnsboro, 5th; greatest monthly range, 55, at Winnsboro; least monthly range, 25, at Emilie and New Orleans.

Precipitation.—The average was 1.99 below the normal; greatest monthly, 7.85, at Lawrence; least monthly, 0.02, at Amite.

Wind.—Prevailing direction, north.—*George E. Hunt, Local Forecast Official, Weather Bureau, New Orleans, director.*

MARYLAND.

Temperature.—Maximum, 98, at Edgemont, 4th and 5th; minimum, 40, at Boethcherville, 8th; greatest monthly range, 52, at Edgemont; least monthly range, 25, at Jewell.

Precipitation.—Greatest monthly, 5.82, at Frederick; least monthly, 1.75, at Solomons.

Wind.—Prevailing direction, southeast.—*Dr. William B. Clark, Johns Hopkins University, Baltimore, director; Prof. Milton Whitney, Maryland Agricultural College, secretary and treasurer; C. P. Cronk, Observer, Weather Bureau, in charge.*

MICHIGAN.

Temperature.—The mean was 1.0 above the normal; maximum, 91, at Mottville, 4th; minimum, 27, at McMillan, 20th; greatest monthly range, 58, at Crystal Falls; least monthly range, 30, at Noble.

Precipitation.—The average was 0.25 above the normal; greatest monthly, 6.13, at Adrian; least monthly, 1.03, at Lathrop.

Wind.—Prevailing direction, southwest.—*E. A. Evans, Local Forecast Official, Weather Bureau, Detroit, director.*

MINNESOTA.

Temperature.—Maximum, 99, at Granite Falls, 23d; minimum, 22, at Pokegama Falls, 26th; greatest monthly range, 65, at Granite Falls; least monthly range, 35, at Clear Lake.

Precipitation.—Greatest monthly, 3.82, at Bird Island; least monthly, 0.18, at Montevideo.

Wind.—Prevailing direction, south.—*J. H. Harmon, Observer, Weather Bureau, Minneapolis, director.*

MISSISSIPPI.

Temperature.—The mean was 2.1 below the normal; maximum, 98, at Vaiden, 25th; minimum, 42, at Lake, 15th; greatest monthly range, 51, at Port Gibson and Vaiden; least monthly range, 22, at Ship Island.

Precipitation.—The average was 0.29 below the normal; greatest monthly, 9.10, at Pontotoc; least monthly, 0.05, at Jackson.

Wind.—Prevailing direction, northeast.—*R. B. Fulton, Observer, Weather Bureau, University, director.*

NEBRASKA.

Temperature.—Maximum, 110, at Mullen, 13th; minimum, 27, at Ansley, 13th; greatest monthly range, 78, at Mullen; least monthly range, 36, at Holdrege.

Precipitation.—Greatest monthly, 3.77, at Hayes Center; least monthly, 0.00, at Dunning, Palmer, and Bookwalter.

Wind.—Prevailing direction, south.—*Prof. Goodwin D. Swezey, Crete, director; G. A. Loveland, Observer, Weather Bureau, assistant.*

NEVADA.

Temperature.—The mean was 1.0 below the normal; maximum, 109, at Elko, 8th; minimum, 15, at Sunnyside, 22d; greatest monthly range, 89, at Eureka; least monthly range, 33, at Toano.

Precipitation.—The average was considerably below the normal; greatest monthly, 0.61, at Cranes Ranch; least monthly, 0.00, at several stations.

Wind.—Prevailing direction, southwest.—*Prof. Charles W. Friend, Carson City, director; F. A. Carpenter, Observer, Weather Bureau, assistant.*

NEW ENGLAND.

Temperature.—The mean was 0.8 below the normal; maximum, 88, at Andover, 5th; minimum, 27, at Plymouth, N. H., 21st; greatest monthly range, 54, at Plymouth; least monthly range, 20, at Block Island.

Precipitation.—The average was 1.23 below the normal; greatest monthly, 5.63, at Mayfield; least monthly, 0.65, at Andover.

Wind.—Prevailing direction, southwest.—*J. Warren Smith, Observer, Weather Bureau, Boston, director.*

NEW JERSEY.

Temperature.—The mean was 0.3 below the normal; maximum, 90, at Plainfield and New Brunswick, 5th; minimum, 33, at River Vale, 30th; greatest monthly range, 54, at River Vale; least monthly range, 31, at Asbury Park.

Precipitation.—The average was 2.08 below the normal; greatest monthly, 3.78, at Somerville; least monthly, 1.02, at Ocean City.

Wind.—Prevailing direction, southeast.—*E. W. McGann, Observer, Weather Bureau, New Brunswick, director.*

NEW MEXICO.

Temperature.—Maximum, 96, at Las Cruces, 15th; minimum, 28, at Chama, 21st; greatest monthly range, 64, at Chama; least monthly range, 34, at Clayton.

Precipitation.—Greatest monthly, 0.79, at Halls Peak. In the north-central and northwestern parts of the Territory no rainfall was reported.

Wind.—Prevailing directions, east.—*H. B. Hersey, Observer, Weather Bureau, Santa Fe, director.*

NEW YORK.

Temperature.—The mean was 0.3 below the normal; maximum, 89, at Waverly, 25th; minimum, 29, at South Kortright, 21st; greatest monthly range, 58, at Number Four; least monthly range, 32, at New York.

Precipitation.—The average was 0.74 below the normal; greatest monthly, 5.37, at Adams Center; least monthly, 0.57, at Watkins.

Wind.—Prevailing direction, southwest.—*Prof. E. A. Fuytes, Dean of the College of Civil Engineering, Cornell University, Ithaca, director; R. M. Harding, Observer, Weather Bureau, assistant.*

NORTH CAROLINA.

Temperature.—The mean was 1.6 below the normal; maximum, 93, at Chapel Hill, 6th, and at Southern Pines, 1st; minimum, 33, at Bakersville, 27th; greatest monthly range, 51, at Bakersville; least monthly range, 21, at Hatteras.

Precipitation.—The average was 0.79 below the normal; greatest monthly, 15.74, at Columbus; least monthly, 0.40, at Pittsboro.

Wind.—Prevailing direction, northeast.—*Dr. Herbert B. Battle, Raleigh, director; C. F. von Herrmann, Observer, Weather Bureau, assistant.*

NORTH DAKOTA.

Temperature.—The mean was 4.5 above the normal; maximum, 101, at Woodbridge, 17th; minimum, 24, at White Earth, 13th, and at Woodbridge, 15th and 25th; greatest monthly range, 77, at Woodbridge; least monthly range, 51, at Grand Forks.

Precipitation.—The average was 0.79 below the normal; greatest monthly, 2.21, at Fort Stevenson; least monthly, 0.11, at Fort Buford.

Wind.—Prevailing direction, northwest.—*W. H. Fallon, Observer, Weather Bureau, Bismarck, director.*

OHIO.

Temperature.—The mean was normal; maximum, 96, at Logan, 9th; minimum, 34, at Ohio State University, Greenfield, Lordstown, and Van Wert, 27th; greatest monthly range, 56, at Logan; least monthly range, 34, at Ashland.

Precipitation.—The average was 0.67 below the normal; greatest monthly, 5.79, at Montpelier; least monthly, 0.70, at Circleville.

Wind.—Prevailing direction, southwest.—*Prof. B. F. Thomas, Columbus, director; C. M. Strong, Observer, Weather Bureau, secretary and assistant.*

OKLAHOMA.

Temperature.—Maximum, 105, at Purcell, 26th; minimum, 40, at Ponca, 30th; greatest monthly range, 58, at Buffalo and Gate City; least monthly range, 28, at Kingfisher.

Precipitation.—Greatest monthly, 3.76, at Keokuk Falls; least monthly, 0.65, at Burnett.

Wind.—Prevailing direction, south.—*J. I. Widmeyer, Observer, Weather Bureau, Oklahoma City, director.*

OREGON.

Temperature.—The mean was 1.3 above the normal; maximum, 102, at Canyon City, 12th; minimum, 22, at Burns, 21st; greatest monthly range, 68, at Burns; least monthly range, 31, at Astoria.

Precipitation.—The average was 0.33 above the normal; greatest monthly, 10.27, at Glenora; least monthly, 0.12, at Arlington.

Wind.—Prevailing direction, southwest.—*Hon. H. E. Hayes, Master State Grange, Portland, director; B. S. Pague, Local Forecast Official, Weather Bureau, assistant.*

PENNSYLVANIA.

Temperature.—The mean was 1.0 above the normal; maximum, 90, at McConnellsburg, 4th; minimum, 29, at Selins Grove, 30th; greatest monthly range, 59, at Selins Grove; least monthly range, 30, at Philadelphia.

Precipitation.—The average was 0.86 below the normal; greatest monthly, 4.85, at Carlisle; least monthly, 1.18, at Wellsboro.

Wind.—Prevailing direction, west.—*Under direction of the Franklin Institute, Philadelphia; H. L. Ball, Observer, Weather Bureau, assistant.*

SOUTH CAROLINA.

Temperature.—Maximum, 93, at Blackville and Green Pond, 1st; minimum, 40, at Cheraw, 28th.

Precipitation.—Greatest monthly, 14.95, at Port Royal; least monthly, 2.71, at Winnsboro.

Wind.—Prevailing direction, northeast.—*A. P. Butler, Observer, Weather Bureau, Columbia, director.*

SOUTH DAKOTA.

Temperature.—The mean was 4.6 above the normal; maximum, 102, at Alexandria, 23d; minimum, 21, at Parkston, 13th; greatest monthly range, 74, at Parkston; least monthly range, 46, at Forest City.

Precipitation.—The average was 1.10 below the normal; greatest monthly, 1.49, at Brookings; least monthly, trace, at Piedmont, Sioux Falls, and Tyndall.

Wind.—Prevailing direction, south.—*S. W. Glenn, Local Forecast Official, Weather Bureau, Huron, director.*

TENNESSEE WEATHER AND CROP SERVICE.

Temperature.—The mean was 1.0 below the normal; maximum, 92, at Arlington, 10th, and at Byrdstown, 25th; minimum, 38, at Johnson City, 29th; greatest monthly range, 50, at Newport and Milan; least monthly range, 28, at Lookout Mountain.

Precipitation.—The average was 0.54 below the normal; greatest monthly, 5.42, at Chattanooga; least monthly, 0.60, at Springdale.

Wind.—Prevailing direction, south.—*J. B. Marbury, Local Forecast Official, Weather Bureau, Nashville, director.*

TEXAS.

Temperature.—The mean was 0.4 below the normal; maximum, 101, at College Station, 24th, at Aurora and Roby, 27th, and at Highland, 28th; minimum, 36, at Fort Hancock, 14th; greatest monthly range, 63, at Fort Hancock; least monthly range, 21, at Galveston.

Precipitation.—The average was 2.50 below the normal; greatest monthly, 5.99, at Tyler; least monthly, 0.00, at Fort Hancock and Hartley.

Wind.—Prevailing direction, southeast.—*D. D. Bryan, Galveston, director; I. M. Cline, Local Forecast Official, Weather Bureau, assistant.*

UTAH.

The month was one of the driest on record.

Temperature.—Maximum, 102, at Saint George, 7th and 16th; minimum, 20, at Scofield, 21st; greatest monthly range, 67, at Scofield; least monthly range, 36, at Grouse Creek.

Precipitation.—Greatest monthly, 0.54, at Ogden; least monthly, 0.00, at several stations.

Wind.—Prevailing direction, southeast.—*G. N. Salisbury, Observer, Weather Bureau, Salt Lake City, director.*

VIRGINIA.

Temperature.—Maximum, 90, at Nottoway, 25th, at Petersburg, 1st, and at Richmond, 5th; minimum, 36, at Hot Springs, 26th; greatest monthly range, 48, at Nottoway; least monthly range, 31, at Mossingford and Norfolk.

Precipitation.—Greatest monthly, 4.96, at Avon; least monthly, 1.33, at Norfolk.

Wind.—Prevailing direction, northeast.—*Dr. E. A. Craighill, Lynchburg, director; J. N. Ryker, Observer, Weather Bureau, assistant.*

WEST VIRGINIA.

Temperature.—Maximum, 92, at Spencer, 1st; minimum, 32, at Morgantown, 30th; greatest monthly range, 51, at Spencer; least monthly range, 33, at Martinsburg.

Precipitation.—Greatest monthly, 4.49, at Glenville; least monthly, 1.32, at Hinton.—*W. W. Dent, Observer, Weather Bureau, Parkersburg, director.*

WISCONSIN.

Temperature.—The mean was slightly above the normal, except in the central counties where it was slightly below; maximum, 95, at Whitehall, 24th and 30th; minimum, 29, at Barron, 26th.

Precipitation.—The average was considerably below the normal; greatest monthly, 4.26, at Baraboo; least monthly, 0.45, at Bayfield.—*W. L. Moore, Local Forecast Official, Weather Bureau, Milwaukee, director.*

WYOMING.

Temperature.—Maximum, 93, at Wheatland, 27th; minimum, 19, at Saratoga, 11th; greatest monthly range, 65, at Saratoga; least monthly range, 42, at Lander.

Precipitation.—Greatest monthly, 1.60, at Fort Yellowstone; least monthly, 0.00, at Evanston, Fort Washakie, Saratoga, and Wheatland.

Wind.—Prevailing direction, south.—*E. M. Ravenscraft, Observer, Weather Bureau, Cheyenne, director.*

CONTRIBUTIONS AND ORIGINAL ARTICLES.

A SEPTEMBER NORTHER ON THE MEXICAN COAST.

The following description of a "norther" which prevailed along the Mexican coast about Vera Cruz, Mexico, from September 24 to 27, 1892, is furnished by Mr. G. Baturoni, of the Meteorological and Climatological Observatory of the Literary and Mercantile Institute, Vera Cruz:

During the latter part of the month we suffered from a "norther" which was a veritable cyclone and which, if it were not felt at the American ports of the Gulf, would serve to throw a great deal of light upon our investigations, as it would be evidence that some of these "northers" form and develop in the Gulf of Mexico without having any connection with the American "northers."

This storm began on the 24th and continued until the 27th. The maximum wind velocity was reached on the 25th, when it continued with undiminished strength for 6 hours. It blew continually in whirls, carrying away roofs of small houses in the environs of Vera Cruz, dashed the American brig "Bazanes" upon the coast, interrupted telegraphic communication, and caused serious damage on the Mexican Railroad. In the southern part of the state of Vera Cruz, even on the frontier, including Oaxaca, the storm was terrible in character and disastrous in its effects, and lightning was an attendant phenomenon. In that section 5 brick and more than 200 wooden houses were thrown down, a large number of cattle were killed, crops were ruined, trees were uprooted

in great numbers, and, what was still worse, many persons were killed and numbers were injured. At Pachuca and to the north of Vera Cruz the storm was very severe.

At Vera Cruz the wind began to blow from the north on the 23d; at 10 a. m. its velocity was 4 miles per hour; at 3 p. m. 6 miles per hour, and at 10 p. m. 4 miles per hour. At midnight the wind was from the northwest. From 4 to 5 a. m., 24th, there was a torrential rain. The rain ended and the wind remained in the west, returning to north at 9 a. m. At 10 a. m. the velocity was 8 miles per hour; at 3 p. m. 10 miles, and at 10 p. m. 18 miles. The night of the 24th was rainy. At daybreak on the 25th the wind was west-northwest; at 8 a. m. it was north and blowing vigorously; at 10 a. m. it was blowing at the rate of 15 miles per hour; toward 11 a. m. it shifted to west. At 11 a. m. Tampico began to feel the "norther," force 7. As soon as the wind settled in the west the sea gave forth a sound like the continuous rumbling of distant but approaching thunder. At 3 p. m. the wind was still from the west; at 5 p. m. it changed suddenly to north, increasing in strength and blowing in whirling squalls, each more violent than the last. At 10 p. m. the wind velocity was 40 miles per hour and rain fell in torrents. After 10.30 p. m. the squalls, in spite of the rain, were very frequent and showed a velocity of 48 miles per hour. This velocity was doubtless exceeded, but it was impossible to measure it exactly, owing to wind and rain. Violent wind and heavy rain continued until 1 a. m. of the 26th, when the wind diminished in force. The rain continued, however, and in 30 hours more than 5 inches of water fell.

METEOROLOGICAL TABLES.

Meteorological record of Army post surgeons, voluntary, and other co-operating observers, September, 1892.

Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean.			Max.	Min.	Mean.	
<i>Alabama.</i>	o	o	o	<i>Ins.</i>	<i>Alabama—Cont'd.</i>	o	o	o	<i>Ins.</i>
Alco	88	53	72.7	1.15	Fayette	85	50	69.4	1.16
Bermuda *†	87	47	72.5	1.15	Florence a†	87	46	68.2	3.76
Bessemer	90	49	71.1	6.35	Fort Deposit†	88	53	72.0	1.55
Brewton†	96	52	76.5	3.00	Gadsden†	90	57	75.0	2.54
Carrollton *†	86	53	71.0	1.84	Geneva†	88	53	71.5	2.17
Citronelle†	86	60	74.6	4.65	Healing Springs†	95	60	75.2	3.45
Claiborne Landing†	86	55	70.5	1.25	Jasper†	86	37	67.6	5.20
Cordova†	86	55	70.0	4.63	Livingston a†	88	51	71.3	0.67
Daphne†	97	55	77.0	6.58	Livingston b†	90	48	71.5	0.73
Decatur a†	86	43	66.8	5.01	Lock No. 4*	88	58	71.5	2.38
Decatur b†	86	43	66.8	4.47	Lynn†	89	51	70.0	6.08
Eufaula a†	89	50	74.3	3.14					
Evergreen†	89	51	73.3	2.08					

Meteorological record of voluntary observers, &c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean.			Max.	Min.	Mean.	
<i>Alabama—Cont'd.</i>	o	o	o	<i>Ins.</i>	<i>Alabama—Cont'd.</i>	o	o	o	<i>Ins.</i>
Marion	89	53	72.4	3.35	Thomasville†	90	58	73.4	2.43
Maysville†	82	54	69.5	7.51	Tuscaloosa†	86	52	68.2	2.57
Mount Willing†	82	54	73.9	2.26	Tuscumbia a†	86	52	68.2	3.86
Newburg†	85	47	68.2	4.59	Tuscumbia b†	87	48	69.0	2.94
Opelika†	88	55	73.6	2.72	Union Springs a†	91	51	72.8	3.36
Oxanna *†	85	48	69.0	2.54	Union Springs b†	94	50	72.2	3.38
Pine Apple†	89	50	71.7	1.09	Uniontown	89	53	74.0	3.94
Pittsboro†	87	63	75.7	3.40	Valley Head†	84	44	66.7	6.09
Pushmataha†	85	50	70.2	1.25	Wetumpka*	84	60	70.0	3.09
Selma a†	85	50	68.3	1.81	Wilsonville†	84	60	70.0	2.77
Scottsboro	85	50	68.3	3.22					
Sturdevant†	85	50	68.3	3.22	<i>Alaska.</i>				
Talladega†	85	50	68.3	3.22	Killsnoot†	62	34	44.7	8.55
Tallahassee Falls†	85	50	68.3	3.22	Metlakatla†	70	38	54.8	8.38